

REMARKS

Claims 21-31 and 37-41 are pending. Claims 26-27 have been canceled. Claims 37-41 have been withdrawn from consideration. Claim 21 is amended.

Support for the amendment to claim 21 is found in newly cancelled claim 26.

Applicants wish to thank Examiner Zirker for the courtesy of a personal interview on May 2, 2003 with Attorney N. Lambert. No agreement was reached.

§ 102 Rejections

Claims 21-25, 27, 29, and 31 were rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over WO 98/55280. The Patent Office submits in part that: the reference discloses embodiments which are substantially an anticipation of at least maintaining a plurality of wood veneer substrates in a fixed relationship to each other; that the tape is capable of maintaining the wood veneer substrates in a fixed relationship to each other before and during a lamination process and is preferably cleanly removable from the substrates following the lamination process; that the reference teaches that the adhesive may be manipulated by changing the level of tack and the degree of crosslinking to yield a suitable adhesive composition exhibiting the required properties; that the negative results in Examples 2 and 3 in Table 2 of the reference would constitute either an inherent anticipation because the reference utilizes the same materials as do Applicants, or at most, would be an obvious optimization to one of ordinary skill.

WO 98/55280 discloses tapes used to maintain wood veneers in fixed relation to one another. The tape consists of a backing and a rubber or an acrylic adhesive. The principle improvement of this disclosed tape over the known tapes is that the disclosed tape was said to be *cleanly removable from the wood veneer after the wood veneer was bonded permanently in place*. The advantage of improvement of being cleanly removable versus tapes that were not cleanly removable was that the non-removable tape of the prior art had to be removed using cross-grain sanding. According to WO 98/55280, “[a] strongly negative aspect of cross-grain sanding is that the veneer is also aggressively sanded, and frequently has deep scratches that can be removed only by further sanding. Also, frequently the veneer is sanded through, exposing the core board underneath. A sanded-through part cannot be repaired, and is thrown away.” Thus, WO 98/55280

sought to solve the problem of having to aggressively cross-grain sand veneer by providing a tape wherein the adhesive is cleanly removable, resulting in little, if any sanding of the veneer being required.

Applicants have sought to solve the problem of aggressive cross-grain sanding of veneer for tape removal using another approach. In Applicants' case, the bonded veneer article is such that after the veneer pieces are permanently bonded, the liner can be removed in substantially one piece and leaving the adhesive behind on the veneer to be easily sanded off without the grit-clogging liner being present.

Anticipation requires that each and every element of the claimed invention be present in a single reference.

Three basic criteria must be met in order to present a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success, for example, "obvious to try" does not meet that standard. Finally, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure.

In view of Applicants' amendment to the assembly of claim 1, that is, the adhesive comprises poly(alpha-olefin) adhesive, the above rejection does not anticipate or provide a *prima facie* case of obviousness for at least the reason that WO 98/55280 does not disclose or suggest such articles wherein the adhesive comprises poly(alpha-olefin) adhesive.

Additionally, *one of ordinary skill in the art at the time the invention was made* would not look to the disclosure of WO 98/55280 to provide such a poly(alpha-olefin) adhesive (or any adhesive) that substantially sticks to a wood veneer during and after removal of the backing material. This is because WO 98/55280 provides no guidance or motivation or incentive to one of ordinary skill in the art to modify its cleanly removable adhesive to make an adhesive that substantially remains on the wood veneer. WO 98/55280 provides no guidance or motivation or incentive since it discloses cleanly removable veneer adhesive formulations and provides reasons in

the background as to why veneer tapes that are not removable and have un-removable liners are not desirable. WO 98/55280 discloses adhesives that remained on the veneer after the liner had been pulled away that left greater than 10% adhesive on the veneer. Applicants submit that the record and the measurement criterion of the test method and the results in Table 2 of WO 98/55280 provide little support for other than speculation by the Patent Office. Even if, hypothetically, the area covered by adhesive in WO 98/55280 was 50%, Applicants may not consider such an amount to be "substantial." A 50% area coverage in WO 98/55280 is a 5 fold difference in area as compared to the minimum criterion of 10% area to be considered removable.

Moreover, modifying WO 98/55280 as suggested by the Patent Office would render the prior art invention unsatisfactory for its intended purpose. That is, such a modification would render a cleanly removable adhesive to be an adhesive that was not substantially removable. Proposed modifications that render prior art inventions unsatisfactory for their intended purposes provide no suggestion or motivation to make the proposed modification.

For at least these reasons, Applicants submit that the present invention as claimed in claims 21-25, 29, and 31 are novel and unobvious over the cited reference. Accordingly, Applicants respectfully request that the above rejection of claims 21-25, 29, and 31 be withdrawn.

§ 103 Rejections

Claims 26, 28, and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 98/55280 for the reasons of record and the assertion that that poly(alpha-olefin) adhesives, paper veneer tape, and the property of the veneer tape as being initially repositionable are well known and are obvious modifications to one of ordinary skill at the time the invention was made.

Claim 26 has been cancelled rendering the above rejection as to that claim moot.

As discussed above, WO 98/55280 does not disclose all the elements of the claim, provide motivation to one skilled in the art at the time the invention was made to modify the reference as suggested by the Patent Office, and is rendered inoperable for its intended purpose if modified as suggested by the Patent Office, all of which provide no evidence of obviousness. For at least these reasons, Applicants submit that claims 28 and 30 are novel and unobvious over the cited reference. Accordingly, the above rejection of claims 28 and 30 should be withdrawn.

Applicants also respectfully request that the Patent Office cite a reference in support of its assertion that poly(alpha-olefin) adhesives, paper veneer tape, and the property of the veneer tape as being initially repositionable are well known and are obvious modifications to one of ordinary skill at the time the invention was made.

Claims 21-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 98/55280. The Patent Office submits that the reference discloses embodiments which are substantially an anticipation of at least maintaining a plurality of wood veneer substrates in a fixed relationship to each other; that the tape is capable of maintaining the wood veneer substrates in a fixed relationship to each other before and during a lamination process and is preferably cleanly removable from the substrates following the lamination process; and that the reference teaches that the adhesive may be manipulated by changing the level of tack and the degree of crosslinking to yield a suitable adhesive composition exhibiting the required properties.

As Applicants discussed above, WO 98/55280 does not disclose all the elements of the claim, provide motivation to one skilled in the art at the time the invention was made to modify the reference as suggested by the Patent Office, and is rendered inoperable for its intended purpose if modified as suggested by the Patent Office, all of which provide no evidence of obviousness. For at least these reasons, Applicants submit that claims 21-31 are novel and unobvious over the cited reference. Accordingly, the above rejection of claims 21-31 should be withdrawn.

Other Remarks

Applicants submit that support for cancelled claim 32 may be found in the specification at page 6, lines 25-27 stating "[t]he veneer tape comprises a unprimed backing including a thickness of 0.001 to 0.005 inches and a pressure sensitive poly(alpha-olefin) adhesive disposed on the backing."

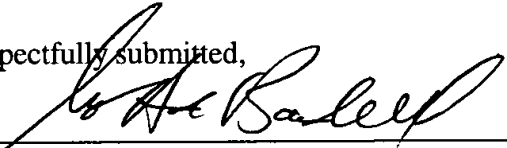
In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Allowance of claims 21-25 and 28-31, as amended, is solicited.

2 July, 2003
Date

Respectfully submitted,

By:


Scott A. Bardell, Reg. No.: 39,594
Telephone No.: (651) 736-6935

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833

SAB/CHB/kmm
54609US006 AMEND RESP 2

Version with markings to show amendments made:

21. (Amended) A veneer assembly comprising:
- a) a first piece of veneer;
 - b) a second piece of veneer adjacent said first piece of veneer; and
 - c) a veneer tape bonded to said first piece of veneer and to said second piece of veneer, wherein said tape includes:
 - i) a backing, including a first major surface and a second major surface opposite said first major surface; and
 - ii) a layer of adhesive **comprising poly(alpha-olefin) adhesive** disposed on the second major surface of said backing;
- wherein said layer of adhesive is selected such that after bonding said veneer assembly to a substrate with an application of either:
- i) 100 psi for 45 minutes at 68°F; or
 - ii) 75 psi for 1 minute at 250°F,
- the bond between said veneer tape and said first piece of veneer and said second piece of veneer is high enough such that upon removing said backing from said veneer assembly, a substantial amount of said layer of adhesive remains on said veneer assembly and wherein said entire backing is removable in substantially one piece after an application of either:
- i) 100 psi for 45 minutes at 68°F; or
 - ii) 75 psi for 1 minute at 250°F,
- to bond said veneer assembly to a substrate.